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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/665,749 09/19/2003		Robert Leah	5577-281	6984	
7.	590 08/01/2006		EXAM	EXAMINER	
Timothy J. O'Sullivan			TERMANINI, SAMIR		
Myers Bigel Si	bley & Sajovec, P.A.				
P. O. Box 3742	28		ART UNIT	PAPER NUMBER	
Raleigh, NC	27627		2179		
			DATE MAILED: 08/01/2006	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.	Applicant(s)				
		10/665,749	LEAH ET AL.					
Office Action Summary			Examiner	Art Unit				
			Samir Termanini	2179				
Period fo	The MAILING DATE of this communic or Reply	cation app	ears on the cover sheet with th	e correspondence address				
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FO CHEVER IS LONGER, FROM THE MA isions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this commu- period for reply is specified above, the maximum state to to reply within the set or extended period for reply reply received by the Office later than three months af- ed patent term adjustment. See 37 CFR 1.704(b).	AILING DA of 37 CFR 1.13 unication. tutory period w will, by statute,	TE OF THIS COMMUNICATI 6(a). In no event, however, may a reply be ill apply and will expire SIX (6) MONTHS for cause the application to become ABANDO	ON. It immely filed om the mailing date of this communication NED (35 U.S.C. § 133).				
Status								
1)[🛛	Responsive to communication(s) filed	d on <i>19 Se</i>	ptember 2003.					
2a)□	This action is FINAL . 2b)⊠ This action is non-final.							
3)□	· _							
,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4) 🛛	Claim(s) 1-12 is/are pending in the ap	pplication.						
•	4a) Of the above claim(s) is/are withdrawn from consideration.							
	Claim(s) is/are allowed.							
	Claim(s) <u>1-12</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
'=	Claim(s) are subject to restrict	tion and/or	election requirement.		4			
Applicati	on Papers							
	The specification is objected to by the	Evaminer						
,	•			ected to by the Examiner				
יבשונטי	10)☑ The drawing(s) filed on <u>19 September 2003</u> is/are: a)☑ accepted or b)☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including		- · · ·		4)			
11)	The oath or declaration is objected to				1).			
	·	Dy 1110 EX						
	ınder 35 U.S.C. § 119							
a)[Acknowledgment is made of a claim f All b) Some * c) None of: 1. Certified copies of the priority of 2. Certified copies of the priority of 3. Copies of the certified copies of application from the Internation of the attached detailed Office action	documents documents of the priori nal Bureau	have been received. have been received in Applicity documents have been received (PCT Rule 17.2(a)).	ation No ived in this National Stage				
2) Notic	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PT mation Disclosure Statement(s) (PTO-1449 or F r No(s)/Mail Date <u>5/9/2005</u> 3/17/2005,	PTO/SB/08\	4) ☐ Interview Summ Paper No(s)/Mai 5) ☐ Notice of Inform ∫0억 6) ☐ Other:					

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DETAILED ACTION

Specification

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (see page 4, line 3, of the specification of the instant application). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Drawings

The drawings are objected to because Fig. 3 shows element 260 to be a 2. "tree map" where the specification specifies element 260 to be a "tree map module." Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Claim Observations

3. The examiner notes that the term "highlighting" recited in Claims 6-7 has been reasonably interpreted to mean: the controlling of a respective bounding box by prominently increasing it <u>or</u> decreasing the color saturation (see page 7, lines 13-20, of the specification of the instant application).

Claim Rejections - 35 USC § 102

- 4. The following is a quotation of the appropriate paragraphs of 35U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Wattenberg et al. (US 6,583,794 B1).
- 6. As to independent **Claim 1**, *Wattenberg et al.* teach a method of displaying data from a data set as a tree map visualization (*See* Figs. 2B through 4,) comprising: Identifying data elements in the data set to be highlighted (identifying: "to indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54, e.g. stock price changes, see col. 3, lines 40 60) and generating a tree map visualization (*see* Figs. 2B through 4) based on the data set where a location of bounding boxes corresponding to the identified data elements have greater color saturation in comparison to other bounding boxes ("to graphically convey to the user," *see* col. 3, lines 35 36, e.g. lighter

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shading for positive stock price change, see col. 3, lines 40 – 60; See also discussion about using multiple shades of <u>one</u> color in col. 3 at lines 49-54, see also col. 17, lines 36-40, "...one color indicating...changes...").

As to independent **Claim 8**, *Wattenberg et al.* teach a tree map visualization displayed on a display device (display screen 20), comprising: a plurality of bounding boxes ("...treemap comprises a space that is divided into multiple rectangular regions..." *see* col. 2 lines 12-15), each bounding box having a color associated therewith ("through the of...color..." col.3, lines 34-37), the color being based on a data value associated with a corresponding bounding box; (e.g. "...the color corresponds to its recent performance..." col.3, lines 40-44) and at least one bounding box having a color saturation greater than a color saturation of another of the plurality of bounding boxes that has the same color as the at least one bounding box so as to highlight the at least one bounding box ("[u]tilizing multiple shades of green [to indicate] price changes" results in greater saturation of another bounding box whenever there is a difference in price change, *see* col. 3, lines 47 – 54; *see also* e.g. Fig. 2B showing differences).

As to independent **Claim 11**, Wattenberg et al. teach a system for displaying data from a data set as a tree map visualization, comprising: means for identifying data elements in the data set to be highlighted (i.e. the bounding box can be highlighted by statically defining its name, see col. 16, lines 18-29; identifying: "to indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54); and means for generating a tree map visualization based on the data set where a location of bounding boxes corresponding to the identified data elements have greater color saturation in comparison to other bounding boxes. (e.g. lighter or darker shading for positive or negative stock price change, see col. 3, lines 40 – 60; See also discussion about using multiple shades of one color in col. 3 at lines 49-54, see also col. 17, lines 36-40, "... one color

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indicating...changes..."; Note that generating means "to graphically convey to the user," see col. 3, lines 35 – 36).

As to independent **Claim 12**, this Claim differs from Claim 1 only in that claim 1 is a method claim whereas claim 12 is an apparatus claim. Thus, this claim is analyzed as previously discussed with respect to claim 1 above.

As to dependent **Claims 2**, *Wattenberg et al.* further teach increasing the color saturation of bounding boxes of identified elements (darker shading, see col. 3, lines 47 – 49).

As to dependent **Claims 3**, *Wattenberg et al.* further teach decreasing color saturation of bounding boxes of elements that are not identified (lighter shading, see col. 3, lines 47 – 49; *See also* col. 16, lines 19–23, ability to modify color scheme; *see also* col. 10, lines 10–22, using black for a neutral performance).

As to dependent **Claim 4**, *Wattenberg et al.* further teach identifying data elements in the data set to be highlighted by identifying data elements (identifying: "to indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54) based on a data value of the data elements that is not utilized in generating the tree map ("...value used to determine color of each region [is based on] any other criteria..., see col. 15, lines 20-29).

As to dependent **Claim 5**, *Wattenberg et al.* further teach identifying data elements in the data set to be highlighted by identifying data elements based on metadata associated with the data elements. (identifying: "to indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54 ;e.g. performance value "...used to determine color of each region...," *See* col. 15, lines 19-21).

As to dependent **Claim 6**, *Wattenberg et al.* further teach identifying data elements in the data set to be highlighted is based on a dynamically determined criteria

(identifying: "to indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54; e.g. stock price, see col. 10, lines 17-21; e.g. patient conditions, see col. 17, lines 61-64; e.g. change in sales, see col. 17, lines 61-64; e.g. performance of students, see col. 18, lines 9-14).

As to dependent **Claim 7**, *Wattenberg et al.* further teach identifying data elements in the data set to be highlighted is based on a statically defined criteria (identifying: "to indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54; i.e. the bounding box can be highlighted by statically defining its name, see col. 16, lines 18-29).

As to dependent **Claim 9**, *Wattenberg et al.* further teach at least one bounding box corresponding to a predefined element of a data set used to generate the tree map visualization ("In one embodiment, the size of a region corresponds to the market capitalization of the company represented by that region and the color corresponds to its recent performance from a predetermined date." *see* col. 3, lines 40-44).

As to dependent **Claim 10**, *Wattenberg et al.* further teach at least one bounding box corresponding to an element of a data set used to generate the tree map visualization that is dynamically selected ("change since" control 906) based on data associated with the element that is not used to generate a size or color of a bounding box of the tree map visualization. (e.g. user-selected periods of time, col. 16, lines 22-25).

Conclusion

The following prior art is made of record and, while not relied upon, is considered pertinent to applicant's disclosure:

- [1] Ben Shneiderman, *Treemaps for space-constrained visualization of hierarchies*, http://www.cs.umd.edu/hcil/treemap-history/index.shtml, (1998-2006).
- [2] Smith et al. (2004/0263513 A1) for teaching a treemap engine.

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[3] Bauernschmidt et al. (US 2004/0168115) for teaching user defined treemap reports.

[4] Baker et al. (US 5581797 A), inter alia, for teaching treemap highlighting and zooming.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir Termanini whose telephone number is (571) 270-1047. The examiner can normally be reached on 9AM - 4PM, Monday-Friday (alternating Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ST/

Samir Termanini Patent Examiner Art Unit 2179

CHANH D. NGUYEN
SUPERVISORY PATENT EXAMINER

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